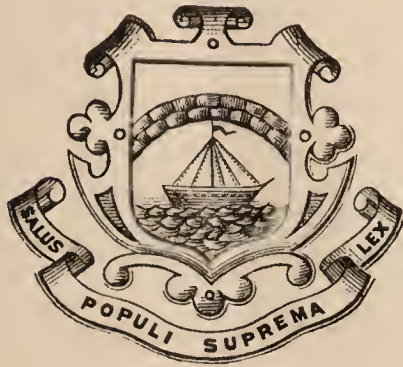


1897.

Tonbridge Urban District Council.



ANNUAL • REPORT
OF THE
MEDICAL OFFICER OF HEALTH,
WITH
REPORTS BY THE SANITARY INSPECTOR
AND THE ENGINEER,
AND A
SPECIAL REPORT BY DR. THRESH,
ON THE
WATER SUPPLY OF THE DISTRICT.

OFFICES OF THE COUNCIL: 83 HIGH STREET, TONBRIDGE.

CHAIRMAN: MR. FRANK EAST, C.C.

CLERK AND SOLICITOR: MR. A. H. NEVE, JUN.

MEDICAL OFFICER } MR JAMES SCOTT TEW, M.D., D.P.H.
OF HEALTH :

ENGINEER AND SANITARY INSPECTOR: MR. W. L. BRADLEY.

ROAD SURVEYOR AND RATE COLLECTOR: MR. GEO. HOBBS.



Digitized by the Internet Archive
in 2018 with funding from
Wellcome Library

<https://archive.org/details/b30190149>

ANNUAL REPORT on the Health of the Tonbridge Urban Sanitary District in 1897.

CENSUS 1881.	CENSUS 1891.
No. of Acres 1,200	No. of Acres 1,200
Inhabited Houses. 1,808	Inhabited Houses. 1,988
Population 9,340	Population 10,117

The **Population** of the Tonbridge Urban District was estimated by the method adopted by the Registrar-General to be **10,612** at the middle of 1897, showing an increase of 85 since the middle of 1896.*

The registered **Births** amounted to **288**, including 165 of males and 123 of females, giving a **Birth-rate** of **27.1**, as against 23.9 in 1896 and 27.8 in 1895.

One hundred and forty-two deaths were returned, which included an equal number of males and females, viz: 71. **The Death-rate** was **14.4** per 1,000, as against 13.2 in 1896 and 13.1 in 1895.

The Infant Mortality, *i.e.* the number of deaths of infants under one year of age per each 1,000 registered births was **114**, as compared with 87 in the previous year and 106 in 1895.

Of the total 142 deaths 12 were caused by one or other of the seven principal Zymotic diseases, viz: one by Scarlet Fever, one by Enteric Fever, seven by Whooping-cough, and three by Diarrhoea.

* Failing a local Census, this method of estimating the population is generally the most reliable, but for Tonbridge, where the relative proportion of increase in new buildings and immigration has apparently been greater during the period of 1891 to 1897 than from 1881 to 1887, the population will most likely be somewhat underestimated. This will not, however, materially affect the Vital Statistics, but will certainly not have the tendency to make them unduly satisfactory.

The Zymotic Death-rate was 1.2 per 1,000, as compared with 0.6 in 1896, and 1.2 in 1895.

Not a single death was caused by either Small-pox, Diphtheria, Membranous Croup, Measles or Puerperal Fever.

During the year 1897 the birth-rate throughout England and Wales was 29.7, the general death-rate 17.4, and the Zymotic death-rate 2.15 per 1,000 of population. The rate of mortality among infants under one year of age to each 1,000 registered births was 156.

NOTIFIABLE DISEASES.

Under the provisions of the Infectious Disease (Notification) Act, 1889, 31 cases were reported as against 84 in the previous year and 197 in 1895.

They included 13 cases of Scarlet Fever, 7 of Diphtheria, 5 of Enteric Fever, and 6 of Erysipelas. It will be seen by these figures that the number of cases of infectious disease is considerably below that of 1896 in every instance.

Small-pox.—Not a single case of this disease occurred throughout the year.

Scarlet Fever.—Only 13 cases, *i.e.*, $\frac{1}{4}$ the number of 1896 occurred throughout the year, of which only one proved fatal, that of an adult in April. The cases and death were returned thus:—

5 - 15 years	15 - 25 years	25 - 65 years	
<u>8</u>	<u>3</u>	<u>2</u>	= 13 cases
		<u>1</u>	= 1 death

Diphtheria.—All the cases of Diphtheria, which were notified were non-fatal, and they occurred 2 in January, 1 in April, 2 in May, 1 in June, and 1 in August, making a total of 7 cases. They occurred at the following age periods:—

5 - 15 years	15 - 25 years	
<u>6</u>	<u>1</u>	= 7 cases

These cases arose in various parts of the town, and in no case could they be attributed to insanitary defects.

During a year, such as the past, when Diphtheria has been specially prevalent, it is gratifying that so few cases have occurred in this town where there are so many young people of susceptible age.

I am quite sure that the length of time during which the contagion persists in the throat is not fully recognised by many parents and those having the care of cases of Diphtheria and Membranous Croup, and it should be clearly understood that after the Membrane has cleared from the throat a period of at least six weeks should elapse before children can with safety return to School or come in close contact with other susceptible persons.

Enteric Fever.—Five cases only of this disease occurred during the year, one in February, and four in October. One death occurred, viz: that of a school boy aged 17 years, who had recently returned from home, and who was removed to the School Sanatorium where he died. The remaining four cases occurred one in Priory Road, two in London Road, and one in Dry Hill Road.

The case in Priory Road was fortunately the only one imported into the town from Maidstone during the Epidemic. It was that of a young man who had been working in Maidstone, and having accidentally injured his foot was obliged to return to his home at Tonbridge where the disease developed.

NON-NOTIFIABLE DISEASES.

Measles.—This disease was not at all prevalent and caused no deaths.

Whooping-Cough was somewhat common among young children during the early Spring, and seven deaths resulted, viz: two in January, three in February, and two in April, and occurred locally, one on Quarry Hill, one at St. Margaret's Place, one in Barden Road, one in Woodside Road, one in the Slade, and two in Priory Road. The patients varied in age from 2 months to 5 years.

Diarrhoea.—This disease caused three deaths, one in August, in St. Stephen's Street, one in September, in Priory Walk, and one in October, in Preston Road. All the patients were infants under one year of age.

Erysipelas.—One death from this disease occurred in March, in Lavender Hill.

Influenza caused one death in January, in Norfolk Road.

School Closure was not necessary throughout the year in any of the Elementary Schools.

ISOLATION.

Nine persons—5 males and 4 females—suffering from infectious disease were removed to the Isolation Hospital, Vauxhall Road, and six cases were treated at the School Sanatorium.

The admissions to the Hospital were as follows:—

January	...	...	1	Diphtheria
April	...	...	1	„
May	...	...	1	„
June	...	...	3	Scarlet Fever
August	...	...	1	„
October	...	...	1	Typhoid Fever
November	...	...	1	Scarlet Fever
Total...				9

The ages of the patients varied from 5 to 34 years; the longest stay at the Hospital was 47 days, the shortest 11 days, and the average stay 31 days. No deaths occurred at the Isolation Hospital during the year.

I have inspected the Hospital on several occasions and have every reason to speak well of its management.

We have experienced but little difficulty in persuading persons to be removed, and also to send their children, where it has been found that efficient isolation could not be provided at home.

The wards are now heated with hot-water pipes in addition to open grates, so that the ventilation can now be much more free without the creation of draughts. New pedestal closets have been put in, and the sewage continues to be satisfactorily disposed of.

The kitchen of the Caretaker's house is far too small, the laundry is inadequate, and a steam disinfecter is required in place of the present hot-air chamber.

Your Committee are, however, fully prepared to recommend substantial improvements in these and other matters, but I do not propose to ask for anything more to be done before the Autumn of 1898, *i.e.*, until the terms of tenure of the site are re-adjusted.

DRAINAGE.

It will be seen in your Engineer and Surveyor's Report the large amount of work which has been and now is in course of being carried out in reference to re-laying of sewers and sewer extensions.

I have had the opportunity of seeing the work so far carried out in its various stages, and have every reason to believe that it is thoroughly well done.

WATER SUPPLY.

The quality of the water supply by the Tonbridge Water Company has for some time past been kept well under observation.

In the Autumn of 1896 I recommended your Council to have water from different parts of the town analysed, and this recommendation was at once acceded to, and analyses have been made at irregular intervals ever since with satisfactory results.

In October, 1897, with a view of further ensuring the constant purity of the public water supply the Urban District Council decided to have regular periodical analyses made.

I suggested, before advising how many and what kind of examinations should be made, that the source, surroundings and general conditions of the supply should be reported on by an independent chemical and geological expert, and Dr. Thresh was accordingly engaged to examine and report—and visited the Works on November 15th last. [A verbatim copy of Dr. Thresh's Report is appended]. The result was that the Council decided to have a chemical and bacteriological examination of the water conducted once a month, with the exception of July, August and September, during which months the examinations are to be fortnightly.

These regular analyses will show any serious deviation of the quality of the water from its usual purity, should such deviation occur, and with the improvements recently made at the Works, and the general drainage improvements now going on in the town, any pollution from outside will become less and less possible.

I should specially add that I have been readily supplied with any information required by the Water Company through their Manager, Mr. Lees, and have had free access to all parts of the Works; in fact the Company have shown a desire to combine with your Council in protecting and improving the supply.

Mr. Bradley's Report, and the customary tables are appended.

I have the honour to be, Gentlemen,

Your obedient Servant,

JAMES SCOTT TEW.

March 2nd, 1898.

TABLE 1.

The number of Deaths from all causes and from the seven principal Zymotic Diseases, with their Death-rates; the principal causes of Death, and the Infant Mortality in the Tonbridge Urban District in each Quarter of 1897.

Quarters.	Total Deaths.	Death-rate per 1000.	Deaths from 7 principal Zymotics.	Zymotic Death-rate.	Small-pox.	Scarlet Fever.	Diphtheria.	Membranous Croup.	Enteric Fever.	Puerperal Fever.	Krysipelas.	Measles.	Whooping-cough.	Diarrhoea.	Rheumatic Fever.	Phthisis.	Heart Disease.	Bronchitis, Pneumonia Pleurisy.	Influenza.	Injuries.	All other Diseases.	Deaths of Infants under one year per 1,000 Births.
1st	52	20.7	6	2.2	...	...	...	...	1	...	1	...	5	...	...	4	6	9	1	...	25	121
2nd	33	14.3	3	1.5	...	1	...	...	...	...	...	...	2	...	...	3	2	3	...	1	21	126
3rd	26	10.1	2	0.7	...	...	...	...	...	...	...	...	...	2	...	2	3	2	...	2	15	119
4th	31	12.4	1	0.3	...	...	...	...	...	...	...	...	...	1	...	4	3	4	...	...	18	92
Totals	142	14.4	12	1.2	...	1	...	...	1	...	1	...	7	3	1	13	14	18	1	3	9	114

TABLE 2.

Deaths from Zymotic Diseases during the past ten years and in 1897.

Zymotic Diseases.	1887	1888	1889	1890	1891	1892	1893	1894	1895	1896	Average of ten years.	1897
Small-pox .....	...	...	...	...	...	...	...	...	...	...	0.0	0
Scarlet Fever .....	...	1	...	...	...	...	1	2	1	...	0.5	1
Diphtheria	1	3	1	...	...	1	2	6	...	...	1.4	0
Fevers.....	2	1	1	...	1	1	...	1	1	3	1.1	1
Measles .....	...	...	7	1	...	3	...	...	6	1	1.8	0
Whooping-cough	1	4	...	4	14	...	4	2	1	1	3.1	7
Diarrhoea	7	4	...	...	1	4	1	...	4	2	2.3	3
Total 7 Zymotics	11	13	9	5	16	9	8	11	13	7	10.2	12
Other Zymotics	1	2	1	5	7	16	7	1	4	...	4.4	3
Totals.....	12	15	10	10	23	25	15	12	17	7	14.6	15

**REPORT and SCHEDULE of Sanitary Work
carried out by the Sanitary Inspector
during the year 1897.**

The Common Lodging Houses have been inspected and appear to be fairly well conducted. Only three houses are now registered for this purpose.

Cowsheds, Dairies, and Slaughter-houses have been periodically inspected, and found in a cleanly condition. No registrations have been made during the year.

The work in connection with the prevention of Infectious Disease has been exceedingly light during this year. It necessitated 20 visits to infected houses (as against 80 last year), the removal of 9 cases to hospital (as against 44 last year), and the disinfecting of about 15 rooms and a small quantity of bedding and clothing.

It has been necessary to resort to legal proceedings during the year in one case only, viz:—exposing unsound shell-fish for sale, for which the offender was fined 20/- and costs.

The Canal Boats have been inspected as usual during the past year.

The following is the Schedule of Work done during the year:—

Notices served (on complaint or otherwise)	36
New W.C.'s, cisterns provided, house drains repaired and unstopped, sink waste taken outside and disconnected, and bell traps replaced by gulleys...	13
Houses completely re-drained and disconnected from Sewer	30
Dust-bins provided	14
Accumulation of filth or manure removed by notice	3
Nuisances caused by keeping animals abated	1
Cases of over-crowding abated	1
Houses lime-washed and cleansed	3
Wells condemned by Analyst	4
Houses supplied with Company's Water	26

WM. LAURENCE BRADLEY,

Assoc. San. Inst.

**REPORT of JOHN C. THRESH, M.D., D.Sc.,
D.P.H., etc.**

Medical Officer of Health, Essex County,

Author of "The Deep and Shallow Well Water of Essex"; "Water and
Water Supplies," etc., etc.

ON THE

**Water supply from the Tonbridge Water
Works,**

Visited and Inspected November 15th, 1897.

The town of Tonbridge with a population of over 10,000, lies on both banks of the Medway. The buildings cover a somewhat hour-glass shaped area, the constricted portion being crossed by the river. The Northern portion is on the Weald clay, and the Southern on the Tunbridge Wells sands. The constricted portion is on the alluvium on the South bank of the river.

The water supplied by the Tonbridge Water Company to the town of Tonbridge is entirely derived from the river gravel on the South side of the Medway.

The whole of the wells and works are comprised within the area of less than half an acre. This area is bounded on the North and East by the Medway, and on the West by a tributary of that river. The ground is practically level and would be periodically flooded were it not that on the exposed sides an embankment has been thrown up to protect it and prevent such an occurrence.

The river gravel is covered with alluvium and loam and is more or less pervious. The thickness is very variable ranging on the area under consideration from 6 to 12 feet. The water bearing gravel beneath has a thickness of from 10 to 16 feet. It is very freely porous and rests upon the Gault, which, being impervious, holds up the water. The flow of this water is naturally in the direction of that of the river, from West to East. At the water-works the gravel bed is narrower than it is either above or below that point and the water therein being more confined has doubtless a more rapid flow. It is to all intents and purposes an underground river that has been tapped at a point yielding water most freely.

The town of Tonbridge is built on both sides of the river, but on each of these sides the bulk of the population resides to the East of the water-works and the natural direction of the drainage is therefore towards the East. Any pollution of the sub-soil upon which the town stands will tend on each side towards the river and towards the East, that is in the direction of its flow. It is not impossible that a small proportion may reach the river gravel sufficiently near the water-works to affect the water there. It is desirable therefore to consider the extent of this danger. Within a radius of 100 yards there is only one cottage, a workshop and a yacht club. These I examined and found the sanitary arrangements such that the possibility of sub-soil pollution was reduced to a minimum. The privies were provided with pails which are taken across the river to empty. The urinals drain into the river. Within the quarter mile radius there is a considerable population. The houses are provided with water closets, and connected with pipe sewers. The latter unfortunately have only plugged joints (Surveyor) so that a little leakage is probable. The whole town is practically within the mile radius. The town on the North bank of the river is on the Gault and there are no known cesspools. There is very little likelihood of any pollution arising from this side, though a heavy rainfall may wash surface filth into the river. On the South side the town is upon the Tonbridge Wells sands, and a few houses upon the alluvium covering the river gravel. There are no cesspools in this portion nor could the Medical Officer of Health or Surveyor point out other sources of sub-soil pollution. The sewage is carried away to the East some half mile below the water-works, where it cannot possibly affect the water-works water. The surface water after heavy rains will in part enter the river gravel, but most of it undoubtedly will reach the river. The possibility of some polluting matter entering the alluvium and river gravel from the town cannot be disputed, but admitting this, the question arises can it enter the wells or is the sub-soil capable of so purifying it as to render the danger negligible? This question can, I think, be answered by considering first—the effect of a heavy rainfall upon the water yielded by the wells; second—the construction of the wells; and third—the results obtained by chemical and bacteriological examinations of the water.

1. **Effect of Rainfall.** I am assured that the water shows no signs of turbidity however heavy the rainfall, provided floods do not occur. (The effect of floods will be considered later.) It appears therefore that filtration is sufficiently efficient to prevent visible particulate matter entering the wells.

2. The Construction of the Wells. These vary in depth from 19 to 22 feet. Some are lined entirely with iron cylinders, others with brick. One was opened for my examination and the upper portion was evidently impervious, excluding all water save such as came from the gravel.

3. The Analytical Results. All the analyses made are satisfactory, but unfortunately the number is very small and having been made by different people they are not at all points comparable. To be of real service the analyses should be made at regular intervals, and on special occasions, as after heavy rainfall, and preferably by the same person. The only bacteriological examination made also gave satisfactory results.

Everything, therefore, indicates that if any polluting matter enters the sub-soil near the wells it does not deleteriously affect the well water.

The gravel water, however, is almost entirely derived from sources West of Tonbridge, and I find that upon this area there is nothing for many miles of a dangerously polluting character.

A further important point remains for consideration. Are the wells fed by the river water, if so, is pollution therefrom possible?

It is satisfactory to find from the accounts given by the Medical Officer of Health and Surveyor that for many miles above Tonbridge very little sewage enters the river Medway or its tributaries, and the analysis of the river water taken at Tonbridge entirely confirms this statement.

It is admitted that the average level of the water in the wells is below that of the water in the river, hence as the wells are so near the stream the latter must be within the drainage area of the wells. There is almost certainly, therefore, some infiltration from the river, but the deposit upon river beds, especially such as drain, an area like the Weald is very slightly pervious, and the constant clearness and the purity of the water is proof that any such percolation is harmless.

There is another way, however, in which the river water may enter the public water supply, and that is by the floods getting into the water-works area, and over the wells and collecting reservoirs. It is admitted that this has taken place from time to time, and that during and after such an event the

water has been turbid and, therefore, impure. I was shown the new collecting tank in process of construction, and the puddle bank round the works. These when completed will, it is believed, prevent any such occurrence in future. If experience should show that this is not the case then further steps should be taken to prevent further pollution from this cause.

Taking the works as a whole, and without going into details of minor points which have received my careful consideration, I regard the works as being (or that they will be when the improvement are completed) as satisfactory as works on the present site can be. It would in my opinion have been better had the under ground river been tapped some distance above Tonbridge, but where now situated they provide a water which everything indicates to be of a satisfactory character.

That this is so is confirmed by the fact that the mortality from Typhoid Fever in Tonbridge is below the average, and that the Medical Officers of Health have never had the slightest reason to suspect the public water supply of causing disease.

The water pumped from the collecting tanks at the works is forced through a rising main to a reservoir situated one mile South of the town at an elevation of 240 feet above the works. As the supply is constant, and parts of the town are supplied from branches direct from this rising main it must always be full and under pressure. The mains themselves did not come within the scope of my examination. The reservoir is partly above ground and well covered in. It is safe from all but wilful pollution. It would be wise, however, to have the fence so made that maliciously disposed persons would have more difficulty in surmounting it.

JOHN C. THRESH, M.D., D.Sc., F.I.C.,

ENGINEER and SURVEYOR'S REPORT, 1897.

Buildings.

The great activity in the building trade of the town commenced in 1895 still continues to increase.

Buildings in course of erection have been inspected from time to time, only seven notices have been served for breaches of the Bye-laws, apart from verbal instructions, and it is satisfactory to report that there has been no occasion to take legal proceedings. I am also pleased to be able to state that there is a general willingness of the part of local builders to adopt any reasonable suggestions I may make.

The total number of plans submitted to the Council during the past year amounted to 117 sets, of which 6 were disapproved. The approved plans I have classified as follows, and for purposes of comparison I have shown the table for the years 1895 and 1896.

Year.	Alterations and Additions.	Dwell- ings.	Shops.	Public Houses.	Temporary Buildings.	Places of Worship	Factor- ies.	Streets.
1895	29	94	5	1	...	...	4	12
1896	38	176	15	1	...	...	10	2
1897	50	180	10	0	1	3	10	5

The number of houses certified for occupation during the year was 113 as against 50 in 1895 and 125 in 1896.

Sewerage.

The main sewers of the town have been well flushed during the year, both by means of the valve chambers and the flushing van.

Very important new work has been carried out during the year. An Enquiry was held by G. W. Willcocks, Esq., M.I., C.E., an inspector of the Local Government Board, on June 18th, 1897, with reference to the construction of a new

outfall sewer, new sewers in the Wharf, London Road, The Park, and Quarry Hill, including an installation of 2 Shone Ejector Stations with the necessary air mains and air compressor. The whole of the plans for which were prepared by myself, and the Local Government Board's sanction was received in October last. I was instructed to carry out the work departmentally without a contractor tenders being obtained for the supply of materials, and I am pleased to say that very considerable progress has been made with the work, which I venture to state has been executed in a thoroughly substantial manner. Up to the time of writing, the outfall sewer has been laid as far as Orphan Place (a length of 2,400ft.) The Wharf sewer has been completed (a length of 1,250ft.) The London Road sewer from the Ejector Station at Hilden Bridge to the extremity of the boundary has been completed (a length of 2,050ft.) The Hadlow Road sewer is just commenced, The Wharf and Hilden Ejector Stations and Ejectors, are completed, and about 2,400ft. of the air main laid. A short length of sewer has also been laid in the High Street for the purpose of draining the new Shops, with the necessary manholes and flushing chamber. A length of new surface water drain has also been laid in the Quarry Hill Estate for the purpose of diverting the surface water from Woodspring and Judd Roads, which was found to be too much for the sewer at the lower end of St. Mary's Road to take.

In addition to the above work, which has been done by the Council, 3,200ft. of sewers have been laid in private streets under my supervision, together with the necessary manholes and flushing chambers. New manholes have been built at the junction of Lambert's Yard and the High Street, and in Pembury Grove. Six new ventilating shafts have been erected in various parts of the town.

Sewage Works and Farm.

The work of this department has been carried on in my opinion in a fairly satisfactory manner; about 800ft of new brick effluent carriers have been constructed, which are a very great improvement on the old system. A considerable portion of land has been levelled and underdrained, and an experimental bacteriological filter will be constructed early in the year.

Scavenging.

This work has been carried on as satisfactorily as possible, a much less number of requests having been received than heretofore; over 3,000 loads of refuse have been carted away to the Farm, and I beg to call the Council's attention to the very rapid growth of the district, and the increasing amount of work to be done in this department.

Isolation Hospital.

No new work of a constructional nature has been required in this department during the year.

New Roads.

The following roads have been made up during the year, having a total length of about 4,000ft. viz :—

Uridge Road, by Contract.....	at 18/11 per ft.
Barden Road, ditto	at 21/6 „
Northcote Road, by Council departmentally ...	at 9/3 „
Pembury Grove ditto	at 4/4 „

The above streets were made up under the Provisions of the Private Street Works Act, 1892.

Springwell Road	}	at 15/6 per ft.
St Mary's Road		
The Avenue		
Woodfield Road (portion of)		

Made up by the Council departmentally under the Provisions of the Judgment in the matter of the Council *versus* Punnett.

The whole of the foregoing roads, with the exception of Barden Road, have been formally taken over by the Council.

Pleasure Grounds, etc.

An Enquiry was held on the 25th August, 1887, by Col. Durnford, R.E., with reference to an application by the Council for sanction to borrow the sum of £9,600, for the

purchase of Tonbridge Castle and Grounds for the purposes of Pleasure Grounds, Public Offices, Dépôt, Electric Light Station, and Fire Brigade Station, and I am pleased to be able to state that sanction has been granted, and that the town has now become the owners of this property, which will no doubt in future years be a great feature of attraction.

Street Improvements.

HIGH STREET.

During the year 6 new shops have been erected in furtherance of this scheme, including Mr. Manwaring's New Offices, and the Railway Arms Inn has also been re-built on the adjoining site.

Several other properties have also been acquired by the Council, including the site for the proposed Free Library and Technical Institute, and by the end of next year the immense improvement of this important undertaking will probably be seen nearing its completion.

The County Council propose to go on with the widening and improvement of the Little Bridge early in the coming year, one abutment on the South side having been put in during the last Summer under my supervision.

Three new shops have also been erected on the East side of the Street in accordance with the old building line.

Another important improvement has been effected by purchasing a piece of ground in front of the Angel Hotel, bringing the frontage line in that point to correspond with the front fence of the Congregational Chapel.

EAST STREET.

A much needed improvement has been effected by the purchase of a slip of land from the Trustees of the Wesleyan Chapel, which projected some 3ft. into the Street, and setting back lineable with the adjoining properties.

Plans have been prepared and submitted to the Local Government Board for a new sewer in Shipbourne Road, and for the new Free Library and Technical Institute.

New Free Library and Technical Institute.

The Local Government Board's sanction for a loan for the site having been obtained, the Council invited competitive designs for these buildings to cost not exceeding £4,000; and in response to the advertisement 28 sets of plans were sent in, and the 1st, 2nd and 3rd premiums were awarded to the authors of the designs with the following noms-de-plume—

1st “Art.”
2nd “Light.”
3rd “Expert.”

The Author of the first premiated design, who is Mr. J. H. Phillips, M.S.A., was duly instructed to carry out the work which it is hoped will be started early in 1898. A professional adjudicator was appointed by the Council in the person of Mr. F. W. Hunt, F.R.I.B.A., of York Place, Portland Square

Bye-Laws.

I am pleased to be able to state that the new Bye-laws have been approved by the Local Government Board and it is hoped will soon be in operation in this district.

The rapid growth of the town still continues, and I append herewith a table shewing the increase in the rateable value of the last 5 years.

	£	s	d.
1893	48,061	5	0
1894	50,747	5	0
1895	53,949	0	0
1896	55,535	0	0
1897	58,371	0	0

In concluding this my third Annual Report I again beg to thank the Council for the kind consideration I have received at their hands.

WM. LAURENCE BRADLEY, C.E.,

Engineer and Surveyor.